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APPLICATION NO	). F	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/643,391		08/18/2003	Heinrich Heilbronner	Y3-6	3625
39648	7590	09/27/2006		EXAMINER	
ANDREV			CHU, CHRIS C		
LACKENI ONE CHA		EGEL, LLP	ART UNIT	PAPER NUMBER	
SCARSDA			2815		
				DATE MAILED: 09/27/2006	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		17	/				
	Application No.	Applicant(s)					
	10/643,391	HEILBRONNER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Chris C. Chu	2815					
The MAILING DATE of this communication ap Period for Reply	pears on the cover sheet with the	correspondence address					
A SHORTENED STATUTORY PERIOD FOR REPL WHICHEVER IS LONGER, FROM THE MAILING D  - Extensions of time may be available under the provisions of 37 CFR 1.4 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period - Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	PATE OF THIS COMMUNICATION  136(a). In no event, however, may a reply be will apply and will expire SIX (6) MONTHS from the cause the application to become ABANDO	ON. timely filed om the mailing date of this communication. NED (35 U.S.C. § 133).					
Status							
1) Responsive to communication(s) filed on 03 A	August 2006.						
2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This	s action is non-final.						
3)⊠ Since this application is in condition for allowa							
closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11,	453 O.G. 213.					
Disposition of Claims							
4)⊠ Claim(s) <u>1 - 29</u> is/are pending in the application	on.						
4a) Of the above claim(s) is/are withdra	4a) Of the above claim(s) is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.						
6) Claim(s) is/are rejected.	Claim(s) is/are rejected.						
• - • • • • • • • • • • • • • • • • • •	☑ Claim(s) <u>1 - 29</u> is/are objected to.						
8) Claim(s) are subject to restriction and/	or election requirement.						
Application Papers							
9) The specification is objected to by the Examin	er.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.							
Applicant may not request that any objection to the							
Replacement drawing sheet(s) including the correct							
11)☐ The oath or declaration is objected to by the E	xaminer. Note the attached Offi	ce Action or form P1O-152.					
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreig a)⊠ All b)□ Some * c)□ None of:	n priority under 35 U.S.C. § 119	(a)-(d) or (f).					
1. Certified copies of the priority documer	nts have been received.						
2. Certified copies of the priority documer	nts have been received in Applic	ation No					
3. Copies of the certified copies of the price	•	ived in this National Stage					
application from the International Burea		• 4					
* See the attached detailed Office action for a lis	it of the certified copies not rece	ived.					
·							
Attachment(s)  1) Notice of References Cited (PTO-892)	4) Interview Summ	ary (PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mai	I Date					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 8/18/03.	5) Notice of Inform 6) Other:	al Patent Application					

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#### **DETAILED ACTION**

#### Election/Restrictions

1. Claims 1 – 29 are in condition for allowance. The restriction requirement between species, as set forth in the Office action mailed on June 15, 2006, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 821.04(a). The restriction requirement is hereby withdrawn as to any claim that requires all the limitations of an allowabile claim. Claims 3 and 22, directed to Species II withdrawn from further consideration because a surface element avoids close contact with at least one of a ribbon conductor and at least one power semiconductor component require all the limitations of an allowable generic linking claim as required by 37 CFR 1.141.

In view of the above noted withdrawal of the restriction requirement, applicant is advised that if any claim presented in a continuation or divisional application is anticipated by, or includes all the limitations of, a claim that is allowable in the present application, such claim may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a restriction requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971). See also MPEP § 804.01.

## Ex Parte Quayle

2. This application is in condition for allowance except for the following formal matters:

(A) In claim 10, line 4, "said at least one ribbon connector" should be --said at least

two mutually insulated ribbon connectors-- because the limitation should be

consist with other claims.

(B) In claim 12, line 4, "said at least one base element" should be --at least one base

element-- because the limitation "said at least one base element" lacks antecedent

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basis.

(C) In claim 27, lines 2 and 3, "DC port conductor" should be --DC port conductors--

because the limitation should be consist with other claims.

Prosecution on the merits is closed in accordance with the practice under Ex parte

Quayle, 1935 C.D. 11, 453 O.G. 213.

A shortened statutory period for reply to this action is set to expire **TWO MONTHS** 

from the mailing date of this letter.

## REASONS FOR ALLOWANCE

3. The following is an examiner's statement of reasons for allowance:

The prior art of record does not teach or suggest, either singularly or in combination, at least DC port conductors being arranged proximate to each other and at least one of ribbon conductors; each the DC port conductor including at least a first substantial length portion in parallel to a second respective substantial length portion on the second DC port conductor; an AC port conductor having at least one portion proximate at least one of a substrate and the at least one of ribbon conductors; the AC port conductor having at least one portion proximate at least one portion proximate at least one of the substrate surface and the ribbon connectors; and at least one surface element

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extending at least at a first angle from one of the AC port conductor and the DC port conductor as set forth in claims 1, 15, 18 and 21. Shirakawa et al. (U. S. Pat. No. 6,525,950) teaches at least DC port conductors being arranged proximate to each other and at least one of ribbon conductors; each the DC port conductor including at least a first substantial length portion in parallel to a second respective substantial length portion on the second DC port conductor; an AC port conductor. However, Shirakawa et al. does not teach the AC port conductor having at least one portion proximate at least one of the substrate surface and the ribbon connectors; and at least one surface element extending at least at a first angle from one of the AC port conductor and the DC port conductor as set forth in claims 1, 15, 18 and 21.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Maeno, Koike et al., Sofue et al., Yamada et al., Mori et al., Mourick, Parkhill et al., Maly et al., Schulze et al., Ahmed et al., Buckle et al. and Porst et al. disclose a power semiconductor device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chris C. Chu whose telephone number is 571-272-1724. The examiner can normally be reached on 11:30 - 8:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kenneth Parker can be reached on 571-272-2298. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <a href="http://pair-direct.uspto.gov">http://pair-direct.uspto.gov</a>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chris C. Chu Examiner Art Unit 2815

c.c. Tuesday, September 19, 2006

> KENNETH PARKER SUPERVISORY PATENT EXAMINER